

VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

☒ Conceptual Proposal ☐ Final Proposal Date 4-4-11
Contract ID 110121-301 Job No. 13B0801K
County Pike, Ralls, and Lincoln Original Bid Cost 1,381,789.00
Contractor Lehman Construction LLC By Kenny Lehman
Designed By Kenny Lehman Phone 573-796-8101
VECP# 11-29 (to be completed by C.O.) VECP ☐ or PDVECP ☒

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages
Existing planned temporary bypass on BR04431 on Rte. F in Suverton, MO consist of an approximate surface area of 2029 SY bypass. We propose to shorten this bypass up to an approximate surface area of 1234 SY bypass. We feel this will still allow our crew enough room to stage for this project. By reducing this area it will eliminate approximately 951 CY of embankment, 950 CY of Class A excavation, and 45 ton of Crushed Stone B. (attached are drawings showing route of proposed change).

2. Estimate of reduction in construction costs. 12,954.00

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.
Shouldn't effect

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

4-4-11
(date)

5. Deadline for issuing a change order to obtain minimum cost reduction, noting the effect of contract completion time or delivery schedule.

7-15-11
(date)

Could effect the start of BR. 04431
(effect)

6. Dates of any previous or concurrent submission of the same proposal.

(date and/or dates)

Additional Comments:

*** Portion Below This Line To Be Filled Out by MoDOT ***

Comments: The overall length of the designed temporary bypass was intended to allow adequate storage of contractor material & equipment. If the contractor has no concerns associated with less storage area, then I believe this proposal would be acceptable. The south end of the contractor's bypass would have to meet similar curve transitions as the North End through.

Submitted By Resident Engineer

5/18/2011
Date

Comments: I agree with RE comments. Shortening of the plan bypass is probably doable but the south end transition would still need to provide decent horizontal alignment for traffic to be able to navigate safely. So, quantities probably can be reduced but not as much as contractor has proposed. Will need to field adjust so dollar amount will change.

☒ Approval Recommended

☐ Rejection Recommended

Macy Rodenbaugh

District Engineer For Paula Gough

5/19/11

Date

Comments:

Not Required.

☐ Approval Recommended

☐ Rejection Recommended

Federal Highway Administration
Required for FHWA Full Oversight Projects

Date

Comments: Approval is contingent on satisfactory results achieved in the field and written acknowledgement by the contractor that they are responsible for the consequences including unanticipated impacts or delays.

☒ Approval

☐ Rejection

David D. Gough

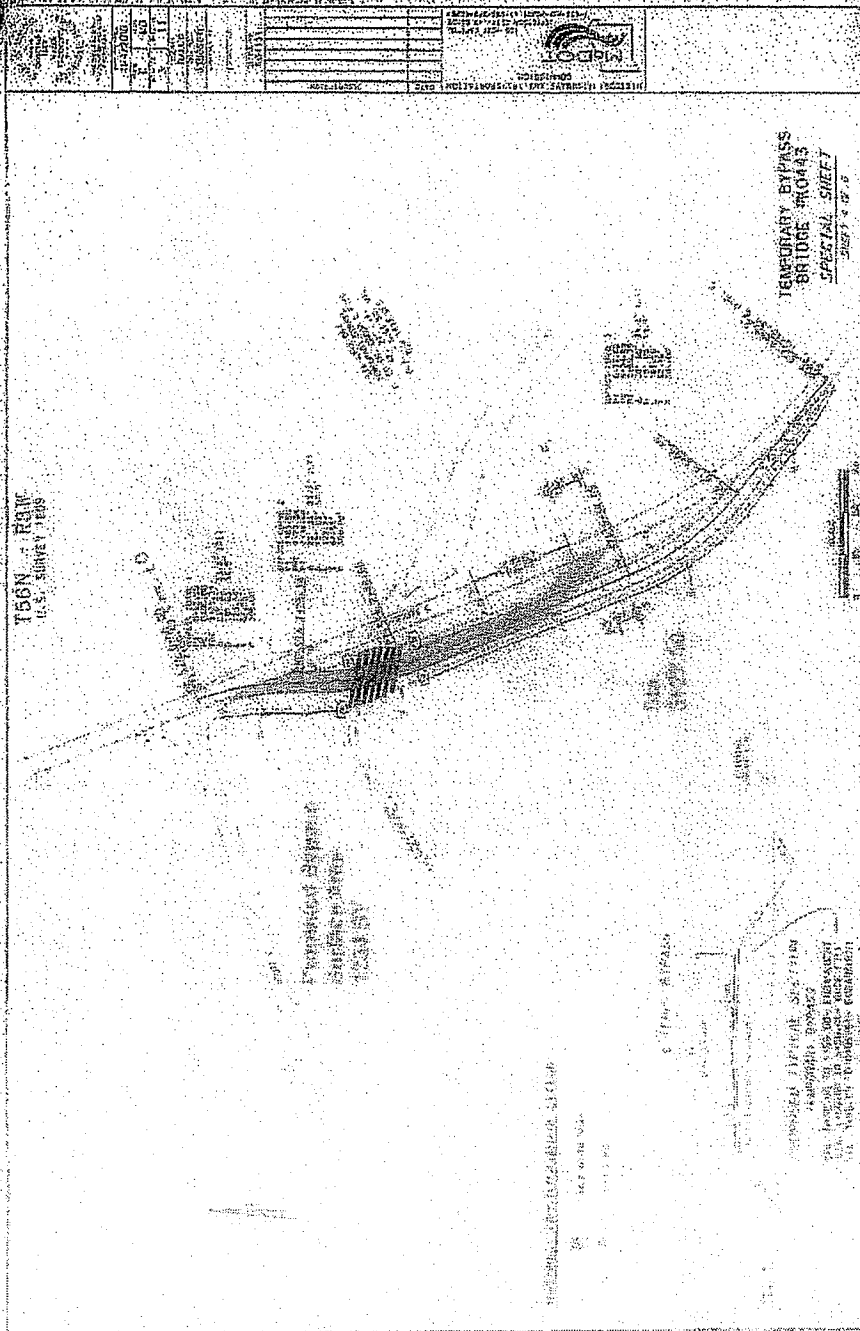
State Construction and Materials Engineer

Date

Digitally signed by Ronald Morris
DN: cn=Ronald Morris, o=MoDOT, ou=3H35,
email=Ronald.Morris@modot.mo.gov, c=US
Date: 2011.05.25 09:51:49 -0500

Definition: Resident Engineer, Project Manager, District Construction & Materials Engineer, State Construction & Materials Engineer, FHWA, State Engineering Administration, MoDOT, P. O. Box 374, Jefferson City, MO 64102

New proposed



MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

CHANGE ORDER

Date: November 14, 2011
Page 1 of 3

TO 0011540 Lehman Construction, L.L.C. Contractor

Change Order No. 007
Contract ID 110121-301
Federal Project No. FAS-5325 (1)
Route WW, E, W, J
Lincoln
Ralls
Pike
County
Change Order Type Division Approval
Federal Oversight No

YOU ARE HEREBY DIRECTED TO MAKE THE FOLLOWING CHANGES FROM THE CONTRACT:
form revised 20110901 cagb

ESTIMATE OF COST OF WORK AFFECTED BY THIS CHANGE ORDER

PROJECT NUMBER	LINE ITEM NUMBER	ITEM CODE	CATEGORY NUMBER	DESCRIPTION	UNITS	UNITS PREVIOUSLY PROVIDED FOR	UNITS TO BE CONSTRUCTED	UNITS OVERRUN, UNDERRUN, CONTINGENT	CONTRACT OR AGREED UNIT PRICE	AMOUNT OF OVERRUN OR PLUS CONTINGENT	AMOUNT OF UNDERRUN OR MINUS CONTINGENT
13B0801K	0300	2031000	0101	CLASS A EXCAVATION	CUYD	4,774.0000	3,044.0000	(1730.0000)	\$7.500		(\$12,975.00)
	0310	2035500	0101	EMBANKMENT IN PLACE	CUYD	1,537.0000	838.0000	(699.0000)	\$4.000		(\$2,796.00)
	0320	2036000	0101	COMPACTING EMBANKMENT	CUYD	416.0000	403.0000	(13.0000)	\$8.000		(\$104.00)
	0360	3107002	0101	GRAVEL (A) OR CRUSHED STONE (B) OR CHAT (C)	TONS	148.0000	102.0000	(46.0000)	\$45.000		(\$2,070.00)
	5004	1099902	0301	MISC. COSTS 50%/50% Value Engineering Savings - Temporary Bypass	EA	0.0000	5,286.2500	5286.2500	\$1.000	\$5,286.25	
SETTLEMENT FOR COST OF THE ABOVE CHANGE TO BE MADE AT CONTRACT UNIT PRICES, EXCEPT AS NOTED:										\$5,286.25	(\$17,945.00)

RECEIVED NOV 16 2011
Contractor Approval done 11/15/11 *KL*
RE Approval done 11/17/11 *NOI*

CONTRACT AMOUNT \$1,381,789.00
OVERRUN THIS ORDER (\$12,658.75)
OVERRUN PREVIOUS ORDERS (\$23,892.75)
TOTAL OVERRUN TO DATE (\$36,551.50)
TOTAL \$1,345,237.50

Signatures required on first page only.

THE TERMS OF SETTLEMENT OUTLINED ABOVE ARE HEREBY AGREED TO:

0011540 Lehman Construction, L.L.C.
CONTRACTOR

By *Kenny Lehman* 11-15-11 Date

Print Name KENNY LEHMAN

Approved - Resident Engineer
Jerad R. Noland

11/15/11
Date

Approved - District Engineer
Paula Gough

11/17/11
Date

David D. Gough
Digitally signed by Dennis Brucks
DN: cn=Dennis Brucks, o=Field Office,
ou=6N25,
email=Dennis.Brucks@modot.mo.gov, c=US
Date: 2011.11.21-16:09:17-0600

Approved - Division Construction & Materials Engineer
Dave Ahlvers

Change Order Reasons

Line Item Number	Reason Code	Description and Reason for Change
0300	VE	VE - Line no. 0300 - Class A Excavation - Underrun: In accordance with Section 104.6 of the Missouri Standard Specifications for Highway Construction, the contractor submitted a Value Engineering proposal to reduce the overall length of the temporary by pass associated with the Bridge R05031 re-construction portion of the contract. Since the overall length of the designed temporary bypass was intended to allow adequate storage of contractor material and equipment, the proposal was accepted. Therefore, this Change Order is necessary to adjust the quantities associated with the Value Engineering Proposal. Calculated quantities are displayed in attached documentation. All measurements were made in accordance with Standard Specifications.
0310	VE	VE - Line no. 0310 - Embankment in Place - Underrun: In accordance with Section 104.6 of the Missouri Standard Specifications for Highway Construction, the contractor submitted a Value Engineering proposal to reduce the overall length of the temporary bypass associated with the Bridge R05031 re-construction portion of the contract. Since the overall length of the designed temporary bypass was intended to allow adequate storage of contractor material and equipment, the proposal was accepted. Therefore, this Change Order is necessary to adjust the quantities associated with the Value Engineering Proposal. Calculated quantities are displayed in attached documentation. All measurements were made in accordance with Standard Specifications.
0320	VE	VE - Line no. 0320 - Compacting Embankment - Underrun: In accordance with Section 104.6 of the Missouri Standard Specifications for Highway Construction, the contractor submitted a Value Engineering proposal to reduce the overall length of the temporary bypass associated with the Bridge R05031 re-construction portion of the contract. Since the overall length of the designed temporary bypass was intended to allow adequate storage of contractor material and equipment, the proposal was accepted. Therefore, this Change Order is necessary to adjust the quantities associated with the Value Engineering Proposal. Calculated quantities are displayed in attached documentation. All measurements were made in accordance with Standard Specifications.
0360	VE	VE - Line no. 0360 - Gravel (A) or Crushed Stone (B) - Underrun: In accordance with Section 104.6 of the Missouri Standard Specifications for Highway Construction, the contractor submitted a Value Engineering proposal to reduce the overall length of the temporary bypass associated with the Bridge R05031 re-construction portion of the contract. Since the overall length of the designed temporary bypass was intended to allow adequate storage of contractor material and equipment, the proposal was accepted. Therefore, this Change Order is necessary to adjust the quantities associated with the Value Engineering Proposal. Calculated quantities are displayed in attached documentation. All measurements were made in accordance with Standard Specifications.

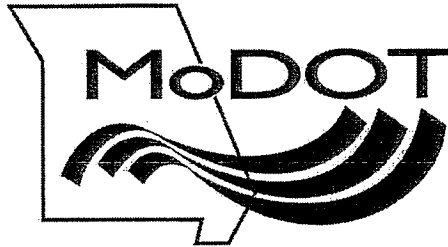
Change Order Reasons

Change Order No. 007

Contract ID 110121-301

Line Item Number	Reason Code	Description and Reason for Change
5004	VE	VE - Line no. 5004 - Misc. Costs, Value Engineering 50/50 Savings - Overrun: Settlement of Costs based upon a Value Engineering 50/50 Savings Summary totalling \$5,286.25. In accordance with Section 104.6 of the Missouri Standard Specifications for Highway Construction, the contractor submitted a Value Engineering proposal to reduce the overall length of the temporary bypass associated with the Bridge R05031 re-construction portion of the contract. Since the overall length of the designed temporary bypass was intended to allow adequate storage of contractor material and equipment, the proposal was accepted. Therefore, this Change Order is necessary to adjust the quantities associated with the Value Engineering Proposal. Calculated quantities are displayed in attached documentation. The savings generated by this Value Engineering proposal resulted from reduced quantities of Class A Excavation, Embankment in Place, Compacting Embankment, and Crushed Stone (B). All measurements were made in accordance with Standard Specifications.

Missouri
Department
of Transportation



Jerad Noland, P.E., Resident Engineer

Hannibal Project Office
Construction Division
P.O. Box 1067
Hannibal, MO 63401
(573) 248-2441
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Toll free 1-888 ASK MoDOT

November 10, 2011

Subject: Value Engineering Calculations – Temporary Bypass
Contract ID 110121-301
Job No. J3B0801K
Route E, Ralls County

Line no. 0300	Class A Excavation	
	Plan Quantity	4,774 cy
	Final Quantity	<u>3,044 cy</u>
	Underrun Quantity	1,730 cy

Line no. 0310	Embankment in Place	
	Plan Quantity	1,537 cy
	Final Quantity	<u>838 cy</u>
	Underrun Quantity	699 cy

Line no. 0320	Compacting Embankment	
	Plan Quantity	416 cy
	Final Quantity	<u>403 cy</u>
	Underrun Quantity	13 cy

Line no. 0360	Crushed Stone (B)	
	Plan Quantity	148 ton
	Final Quantity	<u>102 ton</u>
	Underrun Quantity	46 ton

Line no. 5004 50/50 Value Engineering Savings
This line item is related to the 50/50 savings split associated with the shortening of the temporary bypass for the above-mentioned project. Clarification of the Class A portion of the 50/50 savings calculations. Although the Design plans estimated an overall quantity of 4,774 cy, the Final quantity of 3,044 cy was determined. This quantity difference is a combination of the differences in design estimates and actual field elevations and conditions as well as the savings generated by reducing the overall length of the bypass. The amount of Class A Excavation, associated with the removal of the temporary bypass, that would be associated with the 50/50 savings was determined by calculating the reduction of material necessary to construct the temporary bypass initially. These calculations are as follows:

Embankment in Place		699 cy
Compacting Embankment		13 cy
Crushed Stone (B)	(46 ton x 1.33 ton/cy)	<u>35 cy</u>
Calculated Class A Savings associated with VE		747 cy

50/50 Savings

Line no. 0300 - Class A Excavation	(747 cy x \$7.50)	\$5,602.50
Line no. 0310 - Embankment in Place	(699 cy x \$4.00)	\$2,796.00
Line no. 0320 - Compacting Embankment	(13 cy x \$8.00)	\$104.00
Line no. 0360 - Crushed Stone (B)	(46 ton x \$45.00)	<u>\$2,070.00</u>

Total Savings	\$10,572.50
50/50 Savings Split	\$5,286.25

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☒ TCP/MOT
- ☐ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

This VECP shortens the length of the temporary bypass for the project.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

Cc: Macy.Rodenbaugh, Charles S Spegal

05/25/2011 11:12 AM

Jerad R Noland

Approved VE Proposal for Rte. E Bypass Modification

Ryan,

Here is a copy of the Approval concerning the Value Engineering Proposal concerning the Ralls County, Rte. E bypass modification. As per the comments listed in the VE Proposal, reduction in the overall length of the bypass is approved. However, field modifications will be necessary to insure safe navigation for the public. Therefore, the reverse curves at the south end of the bypass will need to match the reverse curves at the north end.

Let me know if you have any questions or comments. thanks.



Value Engineering Proposal (Approved), Rte. E Bypass.pdf

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